

### **EXAMINER'S AMENDMENT**

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this Examiner's amendment was given in a telephone interview with Louis Weinstein on July 8, 2010.
3. The application has been amended as follows:

#### **CLAIMS**

- Please **replace Claim 8** with the following:

“8. The image pickup system according to claim 2, wherein the shooting condition estimator comprises:

an image characteristic detector for detecting, based on the signal, characteristics of the image based on the signal; and

a regional estimator for estimating the shooting condition of respective regions when an image based on the signal is acquired, based on the image characteristics detected by the image characteristic detector.”

- Please **replace Claim 9** with the following:

“9. The image pickup system according to claim 8, wherein the image characteristic detector comprises at least one type of unit selected from among a specific color detector for detecting specific color regions as image characteristics from the signal, a specific brightness

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detector for detecting specific brightness regions as image characteristics from the signal, and a frequency detector for determining frequency information in local regions of a specified size as image characteristics from the signal.”

- Please **replace** **Claim 10** with the following:

“10. The image pickup system according to claim 8, wherein the image status estimator further comprises a down sampler for down sampling the signal, and the image characteristic detector detects the image characteristics of the image based on the signal down sampled by the down sampler.”

- Please **replace** **Claim 11** with the following:

“11. The image pickup system according to claim 2, wherein the noise reducing unit comprises:

a threshold value setting unit for setting an amplitude value of the noise as a threshold value based on the amount of noise corrected by the correction unit, for one of each pixel, and each specified unit area comprising a plurality of pixels; and

a smoothing unit for reducing amplitude components in the signal that are equal to or less than the threshold value set by the threshold value setting unit.”

- Please **replace** **Claim 12** with the following:

“12. The image pickup system according to claim 3, wherein the noise amount calculator comprises a unit that calculates an amount of noise N using a signal value level L of the signal, a

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temperature T of the image pickup element, a gain G for the signal and a shutter speed S during shooting as parameters, and comprises:

a coefficient calculator for calculating four coefficients A, B, C and D based on three functions  $a(T, G)$ ,  $b(T, G)$  and  $c(T, G)$  using the temperature T and gain G as parameters, and a function  $d(S)$  using the shutter speed S as a parameter; and

a function calculator for calculating the amount of noise N where:

$$N = (AL^B + C)D$$

defined by the four coefficients A, B, C and D calculated by the coefficient calculator.”

- Please **replace Claim 14** with the following:

“14. The image pickup system according to claim 3, wherein the noise amount calculator comprises:

an assigning unit for assigning standard values as standard parameter values for parameters not obtained from the parameter calculating means; and

a look-up table for determining the amount of noise by inputting the signal value level, temperature, gain and shutter speed obtained from one of the parameter calculator and the assigning unit.”

- Please **replace Claim 20** with the following:

“20. The image pickup system according to claim 1, wherein the shooting condition estimator comprises:

an image characteristic detector for detecting, based on the signal, characteristics of the image based on the signal; and

a regional estimator for estimating the shooting situation of respective regions when an image based on the signal is acquired, based on the image characteristics detected by the image characteristic detector.”

- Please **replace Claim 21** with the following:

“21. The image pickup system according to claim 20, wherein the image characteristic detector comprises at least one type of unit selected from among a specific color detector for detecting specific color regions as image characteristics from the signal, a specific brightness detector for detecting specific brightness regions as image characteristics from the signal, and a frequency detector for determining frequency information in local regions of a specified size as image characteristics from the signal.”

- Please **replace Claim 22** with the following:

“22. The image pickup system according to claim 20, wherein the image status estimator further comprises a down sampler for down sampling the signal, and the image characteristic detector detects the image characteristics of the image based on the signal down sampled by the down sampler.”

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- Please **replace Claim 26** with the following:

“26. The image pickup system according to claim 15, wherein the noise amount calculator comprises:

an assigning unit for assigning standard values as standard parameter values for parameters not obtained from the parameter calculating means; and

a look-up table for determining the amount of noise by inputting the signal value level, temperature, gain and shutter speed obtained from one of the parameter calculator and the assigning unit.”

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P. Misleh whose telephone number is (571) 272-7313. The Examiner can normally be reached Monday - Friday between 8:30 AM - 3:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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**/Justin P. Misleh/  
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